

Schedule 10

Pennsylvania Water & Power Company
Overall Replacement Cost of Capital as at December 31, 1945

(1) Kind of Capital	(2) Proportion of Capital Supplied (%)	(3) Applicable Cost Rates	(4) Product Aggre- gate	(5) Proportional Division of Income (%)
<u>I Computation on the basis of the existing capitalization (Sch. 6)</u>				
Debt capital (Schs. 7 and 8)	52.0	2.78	1.446	25.9
Preferred stock capital (Sch. 9)	5.4	3.72	.201	3.6
Equity capital (Sch. 6)	<u>42.6</u>	<u>9.25</u>	<u>3.941</u>	<u>70.5</u>
Total	100.0			100.0
Overall replacement cost rate			5.6	
<u>II Computation on the basis of 25 percent equity capital</u>				
Debt capital (Schs. 7 and 8)	55.0	2.83	1.557	31.7
Preferred stock capital (Sch. 9)	20.0	3.98	.796	16.2
Equity capital	<u>25.0</u>	<u>10.25</u>	<u>2.563</u>	<u>52.1</u>
Total	100.0			100.0
Overall replacement cost rate			4.9	

[22175-C]

Exhibit No. 30

3245

Schedule 11

Pennsylvania Water & Power Company

Application of Evidence of the Competitive Return as a
Test of Reasonableness of the Regulated Return, Assuming
Adoption of an Original Cost Rate Base.

I Consolidated original cost of plant as at
December 31, 1945
Plus working capital estimate
Total

\$ 36,704,706
977,160
\$ 37,681,866

II(a) Estimated cost of constructing, as of
December 31, 1945, a substitute new
plant capable of provid-
ing the same service
Plus working capital estimate
Total

\$ 55,394,792
977,160
\$ 56,371,952

Annual return at 4.9 per cent (Sch. 10)
Rate of return required to provide an
equivalent return on original cost as the
rate base

\$ 2,762,000

7.3

II(b) Consolidated original cost as of December
31, 1945
Plus 42.6 per cent of the difference be-
tween original cost and the cost of a
substitute plant
Plus working capital estimate
Total

\$ 36,704,706
7,961,977
977,160
\$ 45,643,843

Annual return at 5.6 per cent (Sch. 10)
Rate of return required to provide an
equivalent return on original cost as the
rate base

2,556,000

6.8

III(a) Trended cost of construction of physical
properties, as of December 31, 1945
Plus working capital estimate
Total

\$ 62,410,377
977,160
\$ 63,387,537

Annual return at 4.9 per cent (Sch. 10)
Rate of return required to provide an
equivalent return on original cost as the
rate base

3,806,000

8.2

III(b) Consolidated original cost as of December
31, 1945
Plus 42.6 per cent of the difference be-
tween original cost and the trended original
cost of construction
Plus working capital estimate
Total

\$ 36,704,706
10,950,616
977,160
\$ 48,632,482

Annual return at 5.6 per cent (Sch. 10)
Rate of return required to provide an equiva-
lent return on original cost as the rate base

2,723,000

7.2

Schedule 11 (continued)

Pennsylvania Water & Power Company

Application of Evidence of the Competitive Return as a
Test of Reasonableness of the Regulated Return. Assuming
Adoption of an Original Cost Rate Base.

IV(a) Nominal dollar investment adjusted for
changes in purchasing power of the dollar
to 1945
Plus working capital estimate
Total

\$ 50,093,000
977,160
\$ 51,070,160

Annual return at 4.9 per cent (Sch. 10)
Rate of return required to provide an
equivalent return on original cost as the
rate base

\$ 2,532,000

6.6

IV(b) Consolidated original cost as of December
31, 1945
Plus 42.6 per cent of the difference be-
tween original cost and the nominal
dollar investment adjusted for changes
in purchasing power of the dollar to 1945
Plus working capital estimate
Total

\$ 36,704,706

5,703,000
977,160
\$ 43,384,866

Annual return at 5.6 per cent (Sch. 10)
Rate of return required to provide an
equivalent return on original cost as the
rate base

2,430,000

6.4

EXHIBIT No. 31

[22178]

**Cost of Constructing
the Entire Physical Properties of the
Pennsylvania Water & Power Co.
and the
Susquehanna Transmission Company of Maryland
as of December 31, 1945**

March 26, 1946

A study has been made of the cost of constructing and reproducing the entire physical properties of the Pennsylvania Water & Power Company and of the Susquehanna Transmission Company of Maryland as of December 31, 1945. This study was undertaken to determine what would be the cost of reproducing these properties as of December 31, 1945 by the use of modern construction methods.

The prices and costs as of December 31, 1945 will be hereinafter referred to as present day costs, although there have been increases in labor rates and the prices of materials in January and February 1946 and other increases have been authorized or are contemplated. For example, the union scale of wages in Baltimore for common labor went up from 80¢ per hour to 95¢ per hour on January 2, 1946. Truck drivers on December 31, 1945 were getting 75¢ per hour. A wage increase to \$1.00 per hour may go into effect shortly. Likewise, the union wage scale for carpenters which was \$1.67½ per hour on December 31, 1945 may soon go to \$1.77½ per hour. Cement finishers will soon be increased from \$1.50 to \$1.72½ per hour. An increase in the price of steel by \$5.00 per ton was authorized by the Federal Government on February 18, 1946. The present period, characterized by strikes and shortages of many materials is one of rapidly rising prices and costs.

Ceiling prices still prevail on many construction materials. Quotations being made on materials and equipment are usually subject to the price prevailing at the time of delivery. Deliveries for the most part are lengthy or indefinite. Contractors in general are unable to bid lump sum prices without large elements of contingencies to take care of the inflationary trend. Government contracts are being placed with escalator clauses. In view of all of these circumstances and the present unsettled period, we have in our study considered the prices and wage rates frozen as of December 31, 1945.

Methods Used in Determination of Present Costs of Construction

The cost of constructing or reproducing the physical properties of the Companies as of December 31, 1945 is based upon trending the original cost of the properties year by year to the present time. Retirements were deducted according to the year of installation so that the dollars that remain in each account represent the actual original cost of the surviving property, in other words, the actual original cost of the present property according to the year in which the money was spent. An exception to this has been made in the Holtwood Hydro Plant and the early transmission lines and substations, all of the original investment prior to the year 1912 being considered as made in 1912.

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The history of the Companies was studied and a chronological statement has been prepared which shows that 57.4 per cent of the hydro property surviving was installed initially and that for the most part, the subsequent additions have been major ones. From the standpoint of reproduction, therefore, the method used lends itself to the single impulse theory of reproducing the entire property at one time. Deductions have been made or taken into ac-

count to allow for any factor for so-called "piecemeal" construction. Even if the entire property were reproduced under the single impulse theory certain elements would be placed in operation when completed and the construction of the remainder would be carried on while maintaining operation.

The dollars of the surviving original investment have been further segregated year by year in each account into labor, materials, and overheads. The materials have been further broken down into 26 classifications as follows:

1. Rails—Steel for R. R. track
2. Lumber—Timbers for cofferdam and heavy construction
 - Forms for concrete work.
 - General lumber for houses and building purposes
3. Concrete—Concrete for the Dam and appurtenances
 - Concrete for Hydro and Steam Plant Substructures and Superstructure
 - Concrete for Cable Tunnels
 - Concrete for Substation Buildings
 - Concrete for Transmission Tower Footings
 - Concrete for Bus Compartments and floors
4. Structural Steel—Fabricated Structural Steel
 - Transmission Line Towers and Structures
 - Substation Structures and Supports
5. Wire and Cable—Copper Power and Control Cable
6. Metal and Metal Products—Manufactured Products such as:
 - Elevators, Lifts and Hoists
 - Switchgear including Auxiliary Oil Circuit Breakers
 - Lighting and Control Cabinets
 - Meters, Instruments and Gage Panels

7. Pipe—All kinds of Metal Pipe, such as Steam and Oil Piping for Steam Plant, Hydraulic Piping and Oil Piping for Hydro Plant
Cast Iron Water Mains
Air Piping and Ash Sluices
8. Other Building Materials—All building materials except those which have separate indices. This includes doors, windows, roofing, etc.
9. Plumbing and Heating—Covers heating systems and plumbing fixtures.
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10. Reinforcing Bars—Steel reinforcing bars for reinforced concrete
11. Steel Plates and Tanks—Covers fabricated steel plate and tanks
12. Iron and Steel—Covers semi-manufactured products such as lighting beams, stairways, gates, trash screens, cranes, rolling stock, steam boilers, and superheaters, ash sluices, coal conveyors, cyclone separators, etc.
13. Copper—For use as copper bus, copper tubing and connecting straps
Copper for transmission line, conductors, ground wires, and counterpoises
14. Aluminum—Covers aluminum conductors, and aluminum cable steel reinforced
15. Furniture—Office furniture and fixtures
16. Motor vehicles—Passenger cars and trucks
17. House furnishings—For office use
18. Other Mechanical Equipment—Large manufactured products such as Hydraulic Turbines and Generators Steam Turbine Generators, and Air Coolers, Feed Water Heaters and Pumps

Water Supply System and Sand Disposal System**Condensers and Hot Well****Condensate Pumps and Steam Jet Air Pumps****Raw Water Pumps****Auxiliary Electrical Equipment including Feeder Voltage Regulators, Storage Batteries, and Charging Equipment****Main Exciter Units****Compressed Air Pumps****Main Oil Circuit Breakers****Lighting System for Operators Village, etc.**

19. Conduit—Metal conduit for station covering lighting and control cables
20. Brick—All common brick and brick for boiler settings
21. Railroad Track—In power plants and spur tracks—also used for railroad relocation work—includes grading, culverts and drains, ties, rails, fastenings, special work, track laying, ballast, road crossings

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22. Railroad Raising—Railroad relocation
23. Temporary Construction—Any temporary buildings afterward remaining for permanent use—none
24. Patrol Stations—For transmission lines
25. Village Houses—For Operators Village
26. General Overall—Largely labor items from which the labor dollars have been removed. A small amount of materials, blasting powder, dynamite

and caps, small tools, riprap where used, etc., in the following:

Clearing, grading sites

Excavations for dam, forebay and tail-race

Power House substructures, cable tunnels, frequency converter foundations and for substation structures, and substructures for transmission towers and special structures

Backfills and foundation preparations

The overheads have been further broken down year by year as the expenditures occurred into engineering, temporary construction facilities and payroll overheads, and taxes and interest.

In our determination of the present day costs of reproduction a study was made of the actual wage rates paid by the company and its predecessor for both skilled and common labor, and also of the union scale of wages in Baltimore, Philadelphia, and York, Pennsylvania for the various trades and for common labor. Since Holtwood is located about equidistant from Baltimore and Philadelphia, the largest labor markets in the area, and about 23 miles from York, Pennsylvania, it was assumed that in reconstructing the property about 40% of the labor would be drawn from Baltimore, 40% from Philadelphia and 20% from York. Composite rates were, therefore, developed for each skilled trade and for common labor on this basis with certain exceptions such as for hoisting engineers, crane and tractor operators, etc., for which there is no scale for York, these being normally drawn from Philadelphia.

In reproducing a property of this magnitude today, union labor would have to be used exclusively throughout on all of the construction work, although the Company does not now employ any union labor. However, no other

kind of labor is available for construction work of any kind except possibly some small residence. The wage and hour law prevails and the prevailing scale of wages in each locality is the union wage scale. We have, therefore, used as of December 31, 1945 the union wage scales prevailing in Baltimore, Philadelphia, and York for the purpose of reproducing the property, but since the original dollars were put in by Company wage scales, we have trended the original dollars for labor to the December 31, 1945 union wage scale to obtain as closely as ascertainable the present cost of reproducing the property.

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To take into effect the large force that would be required for constructing the property under the single impulse theory and also to establish the proper proportion of skilled and unskilled labor, we have used the construction of the Safe Harbor plant, where very accurate construction cost records were kept, as a guide. From analyses of several Safe Harbor payrolls during 1930 and 1931, we have established a ratio of skilled and semi-skilled dollars and wage rates to common labor dollars and wage rates. This ratio was then applied to the ratio of the Company's skilled labor wage rates to its common labor wage rates each year, and a divisor thereby obtained so that the dollars of common labor and those of skilled labor were determined for each year, and each trended separately to December 31, 1945, and then recombined to obtain the present day value of the labor.

In the development of trend factors for materials, the indexes and average prices published by the United States Bureau of Labor Statistics were largely used as a guide with checks made from quotations and actual purchases made and from a study of the original contracts. In so far as obtainable today, identical equipment was used. When not obtainable, the modern substitute was used as a basis

for determining present day prices, except in those instances when to do so would require a complete redesign of the plant.

The dollars for the different classes of materials were then added to obtain the total dollars of materials by years and these were then combined with the total dollars of labor.

*Overheads, Indirect Costs and
Direct Construction Costs*

To the basic pay of labor and the direct costs of materials, certain other charges are always incurred, and must be added to arrive at what is commonly called the "Direct Construction Cost." Practice varies in regard to the additions of these charges and as to what is included in the "Direct Construction Cost."

Starting with labor, there must be added a factor to cover additional compensation for overtime for all hours worked in excess of the basic 40-hour week. Most contractors in their estimates on building construction figure 10% additional for a 48-hour work week, although actually on the basis of time and one-half for all hours in excess of 40; this figure is $8\frac{1}{3}\%$. We have approached this problem on the basis of a composite labor force with 70% of the force working a 45-hour week (five 9-hour days), 20% working a 48-hour week (six 8-hour days), and 10% working a 54-hour week (six 9-hour days). This gives percentages for overtime pay of 5.56%, 8.33%, and 12.97% respectively, but when allowance is made for rainy days every other week, the composite figure for overtime pay is reduced to 3.428%. This we have used, throughout the work for the various accounts for both inside and outside work and should be considered a minimum for overtime pay.

To the labor dollars must also be added a factor for employees liability insurance (Workmens' Compensation), State and Federal Unemployment insurance, and Federal

Old Age Benefits. A study was made of the number of workers that would be employed in a composite labor force, classified as to occupations and the results of this study were as follows:

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	Total Insurance %	Labor Multiplier Incl. Overtime & Insurance
<i>Pennsylvania</i>		
Hydro Plant	5.66	1.09282
Steam Plant	5.17	1.08875
Transmission Lines	6.15	1.09799
Substations	6.00	1.09633
General Plant	5.60	1.093
<i>Maryland</i>		
Transmission Lines	7.54	1.11226
Substations	6.37	1.10016
General Plant	7.40	1.1108

In addition to the labor factors, there are other charges incurred in the design and construction of any large project whether the construction is carried on by contract, or with the owner's force. In a project of this magnitude, and because of the difficulty of the owner building up a large construction organization under present conditions of labor shortages, it is believed that the project could be constructed in less time and at less total cost by contracting for most of the work. There will, therefore, be incurred by the contractors certain expenses and in addition, thereto, a charge for the contractors' services.

To determine suitable bases for these charges, analyses have been made of the costs of the Safe Harbor Plant, the Holtwood Steam Station, the Transmission Plants, and the General Plants. The studies of Safe Harbor show actual

costs in terms of percentages for indirect and overhead charges were as follows:

HOLTWOOD HYDRO PLANT	Percent of Labor and Payroll Overheads + Material Costs (Safe Harbor Costs)	Percent Used for Holtwood Hydro
INDIRECT COSTS		
<i>Constructors Fees & Expenses</i>		
Contractor's Engineering & Superintendence	0.835	
Contractor's Accounting & Purchasing	1.352	
Contractor's Office Furni- ture Supplies & Expenses	0.160	
Total Contractors Exp.	2.347	
Constructors Fee & Ad- ministrative Exp.	3.456	
Total Constructors Charges	5.803	5.8
<i>Other Indirect Construction Costs</i>		
Construction Equipment	4.363	4.4
Temporary Construction & Service Facilities	7.801	7.8
Insurance (Other than Em- ployee)	0.423	0.4
Testing Equipment	0.035	Omitted
Camp, Commissary, Hos- pital, etc.	0.089) 0.25
Furniture & Equipment	0.137) 0.25
Suspense Account	7.023	Omitted
Total	19.871	12.85
Total Inc. Contractors Fees & Expense	25.674	18.65

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HOLTWOOD HYDRO PLANT and OVERHEAD CHARGES	Percent of Labor and Payroll Overheads + Material Costs (Safe Harbor Costs)	Percent Used for Holtwood Hydro
<i>Engineering and Superintendence</i>		
Consulting Engineers Fees & Expenses	0.547	0.50
Acct. 3941—Administrative	0.543	0.50
Acct. 3951—Eng. & Super- intendence	7.667	7.50*
Acct. 3952—Accounting & Purchasing	0.220	0.25
Acct. 3953—Office Supplies Exp.	1.394	1.40
Total Engineering & Superintendence	10.371	10.15
Preliminary Operating Ex- penses	0.170	0.20
Total Before Interest & Taxes**	36.215	29.00
Taxes During Construction percent of above total	0.126	0.125
Interest During Construction percent of above total	5.783	5.875
	5.909	6.000

*Field 2.5%

Office 5.0%

**Excluding Legal Fees and Expenses

The suspense items included in accounts

- 3991 General Foreman, Guards, etc.
- 3992 Sickness and Vacations
- 3993 Small Tools
- 3994 Operation and Maintenance of Temporary Plant
& Facilities
- 3995 Operation and Maintenance of Temporary
Buildings
- 3999 Miscellaneous Charges

have been omitted from our application of indirect charges to the reproduction of the Holtwood Plant, because we were informed that these charges were in the original cost of the Holtwood Plant, and, therefore, would be duplicated. This does not apply, however, to our method of handling Account 321—Structures & Improvements, and 322—Dams and Waterways—due to our method of treating these accounts.

Legal Fees and Expenses amounting to \$18,315, or 0.0105% of the labor and material base have been omitted from the application to Holtwood, because it is assumed that it would be covered in any valuation of water rights.

From the above percentages, multipliers were calculated to be applied separately to labor and material costs as shown below:

Material Multiplier

$$1.06 \text{ (Interest \& Taxes)} \times 1.29 \text{ (Total before Interest \& Taxes)} \\ = 1.3674$$

Labor Multiplier

$$1.093 \text{ (Overtime and Insurance)} \times 1.3674 \text{ (Material Multiplier)} \\ = 1.4946$$

[22185] (page 8)

HOLTWOOD STEAM PLANT

For the Holtwood Steam Plant, we have determined the additional direct, indirect and overhead charges as follows:

INDIRECT COSTS	Percent of Labor + Overtime Pay + Insurance + Material	
	<hr/>	
	(Same as Used on Holtwood Hydro)	5.8
	(Same as Used on Holtwood Hydro)	0.25
Constructor's Fee & Expenses		
Camp Commissary & Hospital		
Other Construction Costs		
Analysis of Holtwood Steam shows		\$9.17
less .06 Salvage	Used	9.2
Sickness & Vacation	Omitted in this case.	
0.63% of Labor		
Total Indirect Costs		15.25

OVERHEAD CHARGES

Engineering & Superintendence

Consulting Engineers' Fee & Exp.	(Same as Used for Holtwood Hydro)	0.5
Administrative Charges	(Same as Used for Holtwood Hydro)	0.5
Field Engineering & Expediting	(Same as Used for Holtwood Hydro)	2.5
Office Engineering & Drafting		7.0
Accounting & Purchasing		
(Actual Costs Holtwood Steam 0.73)	Used	0.75

Office Supplies and Expenses			
(Actual Holtwood			
Steam	1.16)		
(Safe Harbor	1.394)		
<hr/>			
Average	1/277	Used	1.25
Total Engineering & Superintendence			<hr/>
			12.50
Preliminary Operating Expenses			
Actual Holtwood Steam			
0.42%		Used	.40
Total Before Interest & Taxes			28.15
Taxes (Actual Holtwood Steam 0.10%)			
Interest (Actual Holtwood Steam 2.86%)		Used	3.00

From the above percentages, material and labor multipliers were determined as shown below:

Material Multiplier

$$1.03 \text{ (Interest \& Taxes)} \times 1.2815 \text{ (Total before interest)} \\ = 1.3199$$

Labor Multiplier

$$1.088 \text{ (Overtime + Insurance)} \times 1.3199 \text{ (Material Multiplier)} = 1.4361$$

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TRANSMISSION PLANT

Analyses were made of the actual original costs of the indirect and overhead charges on transmission lines and substations. From these analyses, the present day costs were determined largely on the basis of reproducing the transmission plant in a short period of time. The construction work would be handled by general contractors.

		Actual Original Cost Percent of Labor and Material		
		Pa.	Md.	Pa. & Md.
(a) <i>Transmission Lines Only</i>				
(Accounts 341, 344, 345, 346 & 349)				
Payroll Insurance	3.56	4.29	3.92	
Temporary Construction Facilities	8.69	6.13	7.30	
Engineering	16.88	11.16	13.76	
Interest & Taxes During Construction	3.67	4.56	4.14	
(b) <i>Substations Only</i>				
(Accounts 342 and 343)				
Payroll Insurance	6.45	2.03	5.09	
Temporary Construction Facilities	3.38	2.36	3.10	
Engineering	17.12	11.85	15.70	
Interest & Taxes During Construction	3.36	2.53	3.17	

Further analyses were made of the actual original costs of the Westport, Washington, Perryville and Riverside Transmission Lines which were constructed in 1931, 1932, 1934 and 1937 respectively. These analyses showed that temporary facilities costs ranged from 4.97% on the Riverside Line, (1937) to a maximum of 12.63% on the

Perryville Line (1934) with an average of 8.63% for the four lines. Construction Equipment from 0.08% to 2.76% with an average of 1.35%, Suspense Accounts from 3.80 to 9.23%, with an average of 6.74%. Camp Facilities costs were incurred or shown for only one line, the Riverside Line, and amounted to 0.63%. We have figured the Camp Facilities separately, and have used the percentages shown on the following pages.

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TRANSMISSION LINES ONLY

	<u>Pennsylvania</u> <u>(Accounts 341-345)</u>		<u>Maryland</u> <u>(Accounts 341-346-349)</u>	
	<u>Labor</u>	<u>Material</u>	<u>Labor</u>	<u>Material</u>
Direct L & M (D)	1.000	1.000	1.000	1.000
Overtime Pay	.03428		.03428	
Construction Cost (C)	1.03428	1.000	1.03428	1.000
Insurance 6.15% of (C)	.0636082	7.54%	.0779847	
Camp 3.357% of (D)	.03357		.03357	
Construction Equipment				
6.2% of (C)	.0641253	.062	.0641253	.062
Field Cost (F)	1.1955835	1.062	1.209960	1.062
Contractors Fee & Expenses				
6.5% of (F)	.0777129	.06903	.0786474	.06903
Taxes & Engineering				
9.0% of (C)	.0930852	.09000	.0930852	.09000
Total (T)	1.3663816	1.22103	1.3816926	1.22103
Interest 3% of (T)	.0409914	.0366309	.0414508	.0366309
Total Multipliers	1.407373	1.2576609	1.4231434	1.2576609
Multipliers Used	1.40737	1.25766	1.42314	1.25766

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TRANSMISSION LINES ONLY
INDIRECT COSTS AND GENERAL OVERHEADS

	<u>Pennsylvania</u> <u>(Accounts 344-346-349)</u>		<u>Maryland</u> <u>(Accounts 344-345)</u>	
	<u>Labor</u>	<u>Material</u>	<u>Labor</u>	<u>Material</u>
Direct L & M (D)	1.000	1.000	1.000	1.000
Overtime Pay	.03428		.03428	
Construction Cost (C)	1.03428	1.000	1.03428	1.000
Insurance 6.15% of (C)	.0636082		7.54% .0779847	
Camp 3.357% of (C)	.0347208		.0347208	
Construction Equipment				
6.2% of (C)	.0641253	.062	.0641253	.062
Field Cost (F)	1.1967343	1.062	1.2111108	1.062
Contractors Fee & Expenses				
6.5% of (F)	.0777877	.069030	.0787222	.06903
Engineering & Taxes				
9.0% of (C)	.0930852	.090000	.0930852	.09000
Total (T)	1.3676072	1.22103	1.3829182	1.22103
Interest 3% of (T)	.0410282	.0366309	.0414875	.0366309
Total Multipliers	1.4086354	1.2576609	1.4244057	1.2576609
Multipliers Used	1.40864	1.25766	1.42441	1.25766

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SUBSTATIONS ONLY
ACCOUNTS 342 & 343

	<u>Pennsylvania</u>		<u>Maryland</u>	
	<u>Labor</u>	<u>Material</u>	<u>Labor</u>	<u>Material</u>
Direct L & M	1.000	1.000	1.000	1.000
Overtime Pay 3.428%	.03428		.03428	
Construction Cost (C)	1.03428	1.000	1.03428	1.000
Insurance 6% of (C)	.0620568		6.37% .0658836	
Construction Equipment & Temporary Facilities 3%	.0310284	.030	.0310284	.03
Field Cost (F)	1.1273652	1.030	1.1311920	1.030
Contractors Fee and Expenses 6.5% of (F)	.0732787	.06695	.0735275	.06695
Taxes and Engineering 13.5% of (C)	.1396278	.13500	.1396278	.13500
Total (T)	1.3402717	1.23195	1.3443473	1.23195
Interest 3%	.0402081	.0369585	.0433042	.0369585
Total Multipliers	1.3804798	1.2689085	1.3846777	1.2689085
Multipliers Used	1.38048	1.26891	1.38468	1.26891

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GENERAL PLANT

In order to determine the approximate direct and indirect costs and overhead charges for the General Plant property analyses were made of the actual original costs incurred for each primary account by the Pennsylvania and Maryland Companies.

For the Pennsylvania Company, the result of the analyses are shown below:

Acct. No.	P/R	<u>Original Cost</u>			<u>Cost of Reproduction</u>		
		<u>Percentages of Labor & Material</u>			<u>Percentages Used by Us</u>		
		<u>Eng.</u>	<u>Temp. Facil.</u>	<u>Taxes & Interest</u>	<u>Eng.</u>	<u>Temp. Facil.</u>	<u>Taxes & Interest</u>
371	4.12	18.75	6.5	2.36	11.5	6.5	3.0
372	4.31	11.00	0.117	0.745	11.0	0.117	0.745
373	-	0.54	-	-	0.54	-	-
374	6.2	20.40	6.36	-	11.5	6.36	-
375	6.1	18.00	6.32	0.17	11.5	6.32	0.17
376	7.15	11.10	0.555	7.80	11.1	0.555	2.80
377	3.56	7.85	1.07	1.04	7.85	1.07	1.04
378	4.81	24.00	3.45	3.26	11.5	3.45	3.00
379	6.18	13.75	4.03	-	11.5	4.03	-

Similar analyses of the actual original costs of the Maryland Company were made and the results and percentages used by us are as follows:

Acct. No.	P/R	<u>Original Cost</u>			<u>Cost of Reproduction</u>		
		<u>Percentages of Labor & Material</u>			<u>Percentages Used by Us</u>		
		<u>Eng.</u>	<u>Temp. Facil.</u>	<u>Taxes & Interest</u>	<u>Eng.</u>	<u>Temp. Facil.</u>	<u>Taxes & Interest</u>
371	1.26	17.2	0.33	0.45	11.5	0.33	0.45
372	-	5.75	0.43	2.6	5.75	0.43	2.6
373	-	-	-	-	-	-	-
374	-	12.4	-	-	11.5	-	-
375	-	15.5	-	-	11.5	-	-
376	-	87.5	-	-	11.5	-	-
377	-	9.22	-	0.375	9.22	-	0.375
378	7.28	21.5	1.75	0.66	11.5	1.75	0.66
379	-	-	-	-	-	-	-

From the above analyses and percentages adopted, material and labor multipliers were developed and applied separately for each primary account of the Pennsylvania and Maryland General Plant properties. The summary of multipliers used is presented here:

- 14 -

Acct. No.	Pennsylvania		Maryland	
	<u>Material</u>	<u>Multipliers Labor</u>	<u>Material</u>	<u>Multipliers Labor</u>
371	1.2154	1.3275	1.1233	1.2358
372	1.145	1.2505	1.0894	1.1985
373	1.005	No Labor	None on Labor or Material	
374	1.1786	1.2873	1.1150	1.2267
375	1.1802	1.2890	1.1150	1.2267
376	1.1478	1.2536	1.1150	1.2267
377	1.1328	1.2372	1.0963	1.2061
378	1.1840	1.2932	1.13997	1.2541
379	1.1553	1.2618	None on Labor or Material	

SUMMARY

For the purpose of providing comparative data on 1945 Costs of Reproduction with the actual original costs year by year as they were incurred in the surviving property, the labor and material dollars as of December 31, 1945 were adjusted to give effect to the present day indirect costs and overhead charges, and are presented opposite the total cost of surviving property, by primary accounts for each year. That is up to the end of the year 1944. In making the adjustment for the gross additions and retirements made in the year 1945, the larger retirements were adjusted to the 1945 cost of the dollars as of the year of installation. The 1945 gross additions were then added at actual cost.

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF DEC. 31, 1945
BASED UPON TREND FACTORS

-1-

GRAND SUMMARY - BOTH COMPANIES

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
<p style="text-align: center;"><u>SUMMARY</u> <u>PENNSYLVANIA WATER & POWER COMPANY</u></p>		
Intangible Plant	\$ 790,803	\$ 790,803
Production Plant		
(a) Steam	4,594,803	6,836,425
(b) Hydraulic	18,481,916	34,876,833
Transmission Plant	6,175,506	9,486,600
General Plant	752,574	1,000,041
Total Electric Plant in Service Pennsylvania Water & Power Co.	\$30,795,602	\$52,990,702
<p style="text-align: center;"><u>SUMMARY</u> <u>SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND</u></p>		
Intangible Plant	\$ 9,000	\$ 9,000
Transmission Plant	5,565,553	9,340,003
General Plant	44,077	70,672
Total Electric Plant in Service Susquehanna Transmission Company of Maryland	\$ 5,618,630	\$ 9,419,675
GRAND TOTAL - BOTH COMPANIES	\$36,414,232	\$62,410,377

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF DEC. 31, 1945
BASED UPON TREND FACTORS

-2-

SUMMARY

Account No.	ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
<u>INTANGIBLE PLANT</u>			
301	Organization	\$ 668,530	\$ 668,530*
302	Franchises and Consents	64,005	64,005*
303	Miscellaneous Intangible Plant	58,268	58,268*
	Total Intangible Plant	\$ 790,803	\$ 790,803*
<u>PRODUCTION PLANT</u>			
<u>(A) Steam</u>			
310	Land and Land Rights	\$ 2,000	\$ 2,000
311	Structures and Improvements	1,214,710	2,067,055
312	Boiler Plant Equipment	1,866,969	2,580,059
314	Turbo-Generator Units	806,226	1,221,425
315	Accessory Electric Equipment	401,464	586,152
316	Miscellaneous Power Plant Equipment	303,434	379,734
	Total Steam	\$ 4,594,803	\$ 6,836,425
<u>(B) Hydraulic</u>			
320	Land and Land Rights	\$ 2,749,982	\$ 2,749,982*
	(a) Excluding Railroad Relocation	1,498,434	2,542,446
	(b) Railroad Relocation Only	4,958,609	9,409,241
321	Structures and Improvements	4,020,318	7,675,794
322	Reservoirs, Dams and Waterways	3,458,957	9,030,608
323	Hydraulic Turbines and Generators	1,529,177	2,977,842
324	Accessory Electric Equipment	194,522	338,289
325	Miscellaneous Power Plant Equipment	71,917	152,631
326	Roads, Railroads and Bridges		
	Total Hydraulic	\$ 18,481,916	\$ 34,876,833
<u>TRANSMISSION PLANT</u>			
340	Land and Land Rights	\$ 807,107	\$ 1,498,575
341	Clearing Land and Rights-of-Way	116,267	235,282
342	Structures and Improvements	330,844	558,466
343	Station Equipment	2,781,224	3,890,451
344	Towers and Fixtures	1,102,909	1,964,770
345	Poles and Fixtures	10,892	14,673
346	Overhead Conductors and Devices	989,514	1,266,021
349	Roads and Trails	36,749	58,362
	Total Transmission Plant	\$ 6,175,506	\$ 9,486,600

* Original Cost - Not Trended

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF DEC. 31, 1943
BASED UPON TREND FACTORS

-3-

SUMMARY (Cont'd.)

Account No.	ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1943
<u>GENERAL PLANT</u>			
371	Structures and Improvements	248,014	382,346
372	Office Furniture and Equipment	115,090	138,922
373	Transportation Equipment	56,665	65,278
374	Stores Equipment	13,959	15,133
375	Shop Equipment	31,761	35,117
376	Laboratory Equipment	49,187	55,860
377	Tools and Work Equipment	118,635	139,224
378	Communication Equipment	104,969	150,501
379	Miscellaneous Equipment	17,668	21,034
393	Donations in Aid of Construction	(3,374)	(3,374)
	Total General Plant	752,574	1,000,041
<u>SUMMARY OF TOTALS</u>			
	Intangible Plant	790,803	790,803
	Production Plant		
	(a) Steam	4,594,803	6,836,425
	(b) Hydraulic	18,481,916	34,876,833
	Transmission Plant	6,175,506	9,486,600
	General Plant	752,574	1,000,041
	Total Electric Plant in Service	30,795,602	52,990,702

SUSQUEHANNA TRANSMISSION CO. OF MARYLAND
COST OF CONSTRUCTING PROPERTY AS OF DEC. 31, 1945
BASED UPON TREND FACTORS
SUMMARY (Cont'd.)

Account No.	ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
<u>INTANGIBLE PLANT</u>			
301	Organization	\$ 3,332	\$ 3,332
303	Miscellaneous Intangible Plant	5,668	5,668
	Total Intangible Plant	\$ 9,000	\$ 9,000
<u>TRANSMISSION PLANT</u>			
340	Land and Land Rights	1,909,136	\$ 2,528,645
341	Clearing Land and Rights-of-Way	136,614	317,848
342	Structures and Improvements	364,941	886,932
343	Station Equipment	716,071	1,457,874
344	Towers and Fixtures	1,171,897	2,463,735
345	Poles and Fixtures	491	937
346	Overhead Conductors and Devices	1,237,115	1,620,452
349	Roads and Trails	29,288	63,580
	Total Transmission Plant	\$5,565,553	\$ 9,340,003
<u>GENERAL PLANT</u>			
371	Structures and Improvements	\$ 6,944	\$ 12,208
372	Office Furniture and Equipment	4,216	5,794
373	Transportation Equipment	(1,074)	(1,033)
374	Stores Equipment	1,257	2,203
375	Shop Equipment	927	1,371
376	Laboratory Equipment	241	173
377	Tools and Work Equipment	6,919	8,622
378	Communication Equipment	40,600	57,287
379	Miscellaneous Equipment	0	0
393	Donations in Aid of Construction	(15,953)	(15,953)
	Total General Plant	\$ 44,077	\$ 70,672
<u>SUMMARY</u>			
INTANGIBLE PLANT		\$ 9,000	\$ 9,000
TRANSMISSION PLANT		5,565,553	9,340,003
GENERAL PLANT		44,077	70,672
TOTAL ELECTRIC PLANT IN SERVICE			
SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND		\$5,618,630	\$ 9,419,675

3274

Exhibit No. 31

[22196]

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF DEC. 31, 1945
BASED UPON TREND FACTORS

INTANGIBLE PLANT

ACCOUNT NO. 301 - ORGANIZATION

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Total Organization	\$ 668,530	\$ 668,530*

* Original Cost - Not Trended

[22197]

Exhibit No. 31

3275

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF DEC. 31, 1945
BASED UPON TREND FACTORS

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INTANGIBLE PLANT

ACCOUNT NO. 302 - FRANCHISES AND CONSENTS

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Total Franchises and Consents	\$ 64,005	\$ 64,005*

*Original Cost - Not Trended

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF DEC. 31, 1945
BASED UPON TREND FACTORS

-7-

INTANGIBLE PLANT

ACCOUNT NO. 303 - MISCELLANEOUS INTANGIBLE PLANT

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Total Miscellaneous Intangible Plant	58,268	58,268*

*Original Cost - Not trended

[22199]

Exhibit No. 31

3277

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF DEC. 31, 1945
BASED UPON TREND FACTORS

8

HOLTHOOD STEAM PLANT

ACCOUNT NO. 310 - LAND AND LAND RIGHTS

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
<u>Year</u>		
1939	2,000	\$ 2,000

PENNSYLVANIA WATER & POWER CO.
 COST OF CONSTRUCTING PROPERTY AS OF DEC. 31, 1945
 BASED UPON TREND FACTORS

-9-

HOLTWOOD STEAM PLANT

ACCOUNT NO. 311 - STRUCTURES AND IMPROVEMENTS

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
<u>Year</u>		
1924	\$ 303,742	\$ 507,803
1925	660,364	1,151,799
26	20,804	35,269
27	9,974	17,555
28	4,640	9,620
29	10,260	17,435
1930	43,520	\$ 97,671
31	10,886	23,112
32	848	2,702
33	836	1,526
34	12,758	27,111
1935	1,950	3,351
36	4,302	8,412
37	13,403	19,472
38	3,193	4,400
39	442	805
1940	432	459
41	6,448	8,214
42	98,095	126,142
43	3,127	3,899
44	2,092	2,545
1945 Net Additions	2,594	(2,247)
<u>TOTAL</u>	\$ 1,214,710	\$ 2,067,055

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF DEC. 31, 1945
BASED UPON TREND FACTORS

-10-

HOLTWOOD STEAM PLANT

ACCOUNT NO. 312 - BOILER PLANT EQUIPMENT

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
<u>Year</u>		
1924	\$ 325,234	\$ 413,248
1925	633,069	932,121
26	21,818	30,726
27	11,814	16,888
28	55,469	110,291
29	250	432
1930	131,036	232,236
31	23,897	49,750
32	5,901	13,008
33	7,314	15,314
34	40,148	66,661
1935	5,941	9,632
36	5,543	10,264
37	40,354	53,918
38	8,271	10,296
39	15,562	17,798
1940	59,947	74,798
41	40,451	49,399
42	412,871	453,200
43	4,307	5,359
44	10,928	12,514
1945 Net Additions	6,815	2,349
TOTAL	\$ 1,866,969	\$ 2,580,059

3280

Exhibit No. 31

[22202]

PENNSYLVANIA WATER & POWER CO.

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COST OF CONSTRUCTING PROPERTY AS OF DEC. 31, 1945
 BASED UPON TREND FACTORS

22202

HOLTWOOD STEAM PLANT

ACCOUNT NO. 314 - TURBO-GENERATOR UNITS

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
<u>Year</u>		
1924	\$ 238,418	\$ 358,389
1925	509,403	784,091
26	7,817	12,024
27	8,712	13,375
28	32	12
29	1,119	2,178
1930	1,383	2,547
31	3,444	6,519
32	25	41
33	393	1,076
34	29	-
1935	33	40
36	1,540	2,977
37	-	-
38	1,145	1,653
39	-	-
1940	-	-
41	11,574	11,848
42	15,603	18,430
43	4,475	4,999
44	1,081	1,286
1945 Net Additions	None	None
TOTAL	\$ 806,226	\$ 1,221,425

[22203]

Exhibit No. 31

3281

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF DEC. 31, 1945
BASED UPON TREND FACTORS

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HOLTWOOD STEAM PLANT

ACCOUNT NO. 315 - ACCESSORY ELECTRICAL EQUIPMENT

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
<u>Year</u>		
1924	\$ 75,590	\$ 116,950
1925	163,853	240,539
26	3,893	5,750
27	2,706	4,260
28	4,170	8,299
29	1,898	3,038
1930	30,445	58,748
31	4,158	7,349
32	3,087	5,220
33	122	223
34	6,927	11,127
1935	955	1,590
36	67	84
37	5,789	7,766
38	2,797	3,901
39	1,284	1,718
1940	7,549	4,718
41	8,273	12,461
42	61,537	71,235
43	651	4,814
44	15,470	16,119
1945 Net Additions	243	243
TOTAL	\$ 401,464	\$ 586,152

PENNSYLVANIA WATER & POWER CO.
 COST OF CONSTRUCTING PROPERTY AS OF DEC. 31, 1945
 BASED UPON TREND FACTORS

-13-

HOLTWOOD STEAM PLANT

ACCOUNT NO. 316 - MISCELLANEOUS POWER PLANT EQUIPMENT

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
<u>Year</u>		
1924	\$ 14,610	\$ 20,714
1925	30,332	43,989
26	966	1,305
27	523	732
28	3,196	6,221
29		
1930	687	797
31	1,638	3,489
32	9	16
33	1,842	3,840
34	31,621	57,810
1935	13,644	25,971
36	3,346	6,074
37	28,841	39,234
38	15,428	17,334
39	42,362	50,028
1940	8,458	10,755
41	28,583	38,069
42	17,802	18,586
43	18,238	22,923
44	22,175	26,130
1945 Net Additions	19,133	(14,283)
TOTAL	\$ 303,434	\$ 379,734

[22205]

Exhibit No. 31

3283

PENNSYLVANIA WATER & POWER, CO.

COST OF CONSTRUCTING PROPERTY AS OF DEC. 31, 1945

BASED UPON TREND FACTORS

HYDRAULIC PLANT

ACCOUNT NO. 320 - LAND EXCLUDING R.R. RELOCATION

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Land.* Net Additions	\$ 4,248,416	\$ -
Less R.R. Relocation † Net Additions	1,498,434	-
Land Excluding R.R. Relocation	\$ 2,749,982	\$ 2,749,982*

* Original Cost - Not Trended

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF DEC. 31, 1945
BASED UPON TREND FACTORS

-15-

HOLTWOOD HYDRO PLANT

ACCOUNT NO. 320 - R.R. RELOCATION ONLY

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
<u>Year</u>		
1912	\$ 1,698,309	\$ 2,742,189
1913		
1914	125	257
1945 Net Additions	None	None
TOTAL	\$ 1,698,434	\$ 2,742,446
Credit Payment from R.R.	200,000	200,000
NET TOTAL	\$ 1,498,434	\$ 2,542,446

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF DEC. 31, 1945
BASED UPON TREND FACTORS

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HOLTWOOD HYDRO. PLANT

ACCOUNT NO. 321 - STRUCTURES AND IMPROVEMENTS

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
<u>Year</u>		
1912 and prior years	\$ 2,284,729	\$ 4,514,376
13	148,910	54,627
14	147,459	358,670
1915	-	-
16	-	-
17	18,142	29,889
18	2,293	6,406
19	56,777	94,442
1920	-	-
21	3,662	5,973
22	6,181	10,297
23	668,589	1,772,791
24	622,380	469,388
1925	168,070	243,936
26	273,930	451,171
27	84,777	166,490
28	67,150	113,781
29	37,076	76,103
1930	26,821	54,028
31	35,232	58,173
32	16,414	41,225
33	31,069	64,491
34	27,550	50,093
1935	9,356	13,710
36	18,982	27,906
37	58,603	85,439
38	54,209	68,094
39	36,761	44,343
1940	5,431	12,093
41	34,658	42,965
42	11,667	15,159
43	2,624	4,083
44	264	296
1945 Net Additions	(1,157)	(1,157)
TOTAL	\$ 4,958,609	\$ 9,409,241

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF DEC. 31, 1945
BASED UPON TREND FACTORS

-17-

HOLTWOOD HYDRO PLANT

ACCOUNT NO. 322 - RESERVOIRS DAMS & WATERWAYS

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
<u>Year</u>		
1912	\$ 3,052,665	\$ 6,545,213
13	62,980	71,279
14	9,226	13,630
1915-19	200,847	444,506
1920-25	11,621	10,789
1926-29	159,706	109,719
1930-33	39,641	33,516
1934-41	483,432	447,242
1942-44	-	-
1945 Net Additions	-	-
TOTAL	\$ 4,020,318	\$ 7,675,794

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF DEC. 31, 1945
BASED UPON TREND FACTORS

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HOLTWOOD HYDRO

ACCOUNT NO. 323 - HYDRAULIC TURBINES AND GENERATORS

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
<u>Year</u>		
1912	\$ 1,693,081	\$ 4,805,767
13	343,163	1,036,080
14	252,344	751,936
1915	637	1,624
16	9,454	25,222
17	4,622	8,282
18	3,111	10,333
19	6,239	14,657
1920	6,232	11,340
21	1,775	6,056
22	4,819	14,080
23	525,085	1,170,989
24	361,746	927,097
1925	2,726	6,940
26	5,712	13,872
27	10,572	27,438
28	12,330	40,884
29	8,499	24,530
1930	7,327	19,021
31	4,600	11,459
32	11,722	31,528
33	10,107	21,219
34	16,634	36,259
1935	27,687	44,878
36	55,687	74,593
37	20,905	29,310
38	15,692	21,035
39	21,956	26,524
1940	504	644
41	4,697	5,943
42	2,572	3,223
43	3,077	3,961
44	3,085	3,672
1945 Net Additions	None	None
TOTAL	\$ 3,458,957	\$ 7,030,608

PENNSYLVANIA WATER & POWER CO.
 COST OF CONSTRUCTING PROPERTY AS OF DEC. 31, 1945
 BASED UPON TREND FACTORS

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HOLTWOOD HYDRO PLANT.

ACCOUNT NO. 324 - ACCESSORY ELECTRIC EQUIPMENT

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
<u>Year</u>		
1912 and prior years	306,560	795,872
13	115,095	181,526
14	34,279	87,728
1915	818	1,031
16	2,259	7,397
17	3,505	6,280
18	6,207	27,566
19	10,809	24,564
1920	8,353	19,416
21	13,840	31,529
22	23,720	20,514
23	235,275	471,186
24	139,349	257,524
1925	138,435	241,312
26	12,481	20,938
27	17,325	34,062
28	18,982	38,834
29	21,850	48,223
1930	21,742	42,874
31	73,647	142,284
32	8,153	24,031
33	51,249	114,507
34	11,883	14,912
1935	20,731	27,361
36	23,202	37,846
37	35,284	48,855
38	57,077	67,301
39	4,713	6,084
1940	20,102	23,885
41	53,005	64,233
42	19,131	22,821
43	13,618	15,837
44	3,406	4,417
1945 Net Additions	3,091	3,092
TOTAL	1,529,178	2,977,842

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF DEC. 31, 1945
BASED UPON TREND FACTORS

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HOLTWOOD HYDRO PLANT**ACCOUNT NO. 325 - MISCELLANEOUS POWER PLANT EQUIPMENT**

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
<u>Year</u>		
1912 and prior years	\$ 63,900	\$ 128,918
13	4,763	12,462
14	2,724	7,779
1915	12	23
16	-	-
17	-	-
18	118	141
19	419	328
1920	74	166
21	190	418
22	1,309	2,983
23	7,279	12,235
24	6,415	10,157
1925	14,083	20,002
26	4,025	8,855
27	1,511	2,640
28	9,782	17,386
29	1,007	1,931
1930	13,205	21,212
31	912	1,862
32	3,162	9,844
33	1,068	2,454
34	1,390	1,221
1935	3,751	6,538
36	69	101
37	12,198	14,821
38	9,636	15,666
39	10,751	12,657
1940	211	277
41	528	742
42	1,146	1,366
43	5,406	7,570
44	13,503	15,559
1945 Net Additions	(25)	(25)
TOTAL	\$ 194,222	\$ 338,289

3290

Exhibit No. 31

[22212]

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF DEC. 31, 1945
BASED UPON TREND FACTORS

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HOLTWOOD HYDRO PLANT

ACCOUNT NO. 326 - ROADS, RAILROADS, AND BRIDGES

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
<u>Year</u>		
1912 and prior years	48,030	111,674
1924	88	277
1929	17,033	32,825
1931	267	-
1936	6,499	7,855
1945 Net Additions	None	None
TOTAL	71,917	152,631

[22213]

Exhibit No. 31

3291

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF DEC. 31, 1945
BASED UPON TREND FACTORS

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TRANSMISSION PLANT

ACCOUNT NO. 340 - LAND AND LAND RIGHTS

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Total Land and Land Rights as of December 31, 1944	\$ 809,241	
1945 Net Additions	(2,134)	
TOTAL	\$ 807,107	\$ 1,498,575

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF DEC. 31, 1945
BASED UPON TREND FACTORS

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TRANSMISSION PLANT

ACCOUNT NO. 341 - CLEARING LAND AND RIGHTS-OF-WAY

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
<u>Year</u>		
1912 and prior years	\$ 2,697	\$ 10,781
13	1,478	5,048
14	485	1,958
1915	197	-
17	7	20
1923	40,802	63,539
24	9,845	19,470
28	216	-
1931	13,019	33,961
32	1,762	5,777
33	12	-
34	15,444	43,187
1935	-	-
36	194	-
37	22,266	39,956
38	1,657	2,913
39	-	-
1940	1,557	2,175
41	4,569	6,421
42	60	176
1945 Net Additions	None	None
TOTAL	\$ 116,267	\$ 235,282

[22215]

Exhibit No. 31

3293

PENNSYLVANIA WATER & POWER CO.
 COST OF CONSTRUCTING PROPERTY AS OF DEC. 31, 1945
 BASED UPON TREND FACTORS

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TRANSMISSION PLANT

ACCOUNT NO. 342 - STRUCTURES AND IMPROVEMENTS

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
<u>Year</u>		
1912 and prior years	604	1,220
13	92	230
14	142	415
1915	-	-
16	-	-
17	2,162	4,431
18	1,853	3,258
19	-	-
1920	-	-
21	1	1
22	362	649
23	71,860	108,788
24	6,120	8,812
1925	1,698	3,529
26	2	3
27	301	263
28	29	43
29	595	1,024
1930	165	264
31	19,897	33,214
32	1,001	3,236
33	7,993	15,254
34	106,673	217,988
1935	8,754	13,241
36	5,773	9,669
37	43,010	65,023
38	38,519	51,230
39	1,186	1,669
1940	3,312	4,356
41	1,537	2,142
42	7,421	8,632
43	-	-
44	-	-
1945 Net Additions	(118)	(118)
TOTAL	330,844	558,465

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF DEC. 31, 1945
BASED UPON TREND FACTORS

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TRANSMISSION PLANT

ACCOUNT NO. 343 - STATION EQUIPMENT

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
<u>Year</u>		
1912 and prior years	\$ 314,325	\$ 437,781
13	-	-
14	-	-
1915	910	11
16	527	946
17	28,869	38,954
18	3,327	6,675
19	2,107	3,565
1920	1,106	2,850
21	183	113
22	3,263	7,789
23	205,790	335,190
24	29,247	45,662
1925	88,942	121,095
26	4,142	5,820
27	97,699	141,869
28	5,998	9,688
29	93,174	128,233
1930	37,814	57,011
31	331,950	516,931
32	36,861	90,728
33	5,503	5,958
34	738,492	993,800
1935	45,886	66,135
36	44,131	58,693
37	249,833	327,931
38	231,503	300,514
39	9,176	9,977
1940	70,162	64,072
41	71,671	82,361
42	10,269	10,702
43	8,661	9,664
44	4,122	4,778
1945 Net Additions	5,581	6,935
TOTAL	\$ 2,781,224	\$ 3,830,451

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF DEC. 31, 1945
BASED UPON TREND FACTORS

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TRANSMISSION PLANT

ACCOUNT NO. 344 - TOWERS AND FIXTURES

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
<u>Year</u>		
1912 and prior years	59,910	164,258
13	15,534	39,613
14	19,957	61,110
1915	-	-
16	-	-
17	-	-
18	-	-
19	-	-
1920	63	104
21	84	109
22	34	37
23	362,726	508,084
24	76,326	119,034
1925	-	-
26	1,555	-
27	199	462
28	3,903	251
29	-	-
1930	-	-
31	135,291	274,580
32	21,075	44,491
33	99	-
34	213,918	436,940
1935	1,740	3,482
36	47,243	66,264
37	114,689	231,033
38	23,530	37,747
39	-	-
1940	3,882	5,660
41	-	-
42	1,731	1,995
43	-	-
44	603	700
1945 Net Additions	(1,183)	(1,184)
TOTAL	\$ 1,102,909	\$ 1,964,270